

WILDLIFE ON YOUR PATCH

FRESHWATER EAST MARSH FRESHWATER EAST DUNES (LNR)



in Copyright (c) Licence Number 100023344

24 AUGUST 2010

1. Introduction

We spent an evening at the reedbed and dunes at Freshwater East, observing and recording the local wildlife. This short report highlights some of the more obvious, interesting or rare species that we found and looks at the main types of habitats you have in your community.

2. Ruderal Habitat leading to reedbed at Freshwater East

Leading from the car park to the entrance to the reedbed is a ruderal community of plants. These types of communities occur in areas of disturbances such as along roadsides, and by car parks. They are subjected to ongoing or past disturbances (e.g., vehicle activities, human erosion, soil disturbance, etc.). In these disturbed areas, ruderal assemblages of weedy species become established. They tend to be opportunistic species which produce lots of seeds which disperse widely if they reach an area where they is open ground they quickly establish into fast growing plants, which can often frustrate gardeners.

Ruderal communities are often successional in nature, covering the ground for a few years after a disturbance has taken place, and eventually giving way to the slower growing species and climax communities of the area when the disturbance factor is removed.

Typical ruderal species were found including ragwort, sow thistles, great willowherb, nettles docks and thistles. These communities are very important for wildlife as the plants have lots of flowers producing nectar and the high seed production provides food for birds and other animals.

Some of the species are used as ingredients in current medicine, including foxglove which contains digitoxin which is used to stimulate the heart, it is poisonous if taken if taken in the wrong dosage, Aspirin originate from willow, St John's wort is used a herb to help relieve depression. All plants ending in wort tend to have medicinal properties or have been used to benefit humans in the past.



Soapwort

Soapwort also has a history of being used in the past but for its cleaning rather than medicinal properties. The plant is rich in saponins which produce a lather in water. Crushing the roots and leaves and shaking them in warm water will create this effect. Leaves can also be crushed and rubbed on the hands to make a soap.

Other species are very important in shaping the other plants found in the area, red bartsia is parasitic on grasses so it helps reduce the competition of light and space from large grass species. This species is often used along with yellow rattle to help recreate flower meadows where large grasses have taken over the smaller flowering plants.

3. Boardwalk

The board walk enables access to the reedbed which borders the stream (LLiw) which flows onto the beach at Freshwater East. Reedbeds are an important habitat, they are listed as Biodiversity Action Plan habitats in the UK as several have been lost due to land reclamation through drainage.

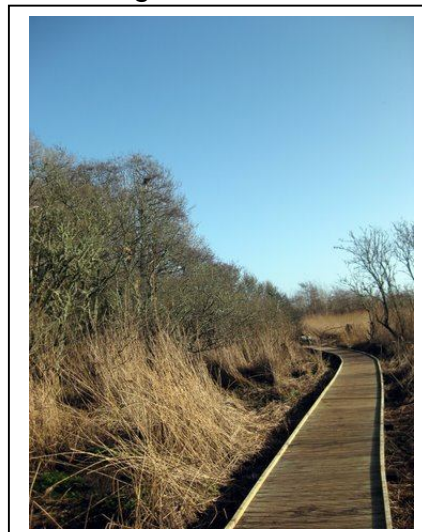
Reedbeds are wetlands dominated by stands of common reed where the water table is at or above ground level for most of the year. They often



include areas of open water and ditches. They are important areas for birds particularly when there is carr woodland associated with them. Characteristic birds of reedbeds include reed bunting, water rail, reed warbler, however occasional marsh harriers can occur. When we were there we saw house martins, swallows, herring gulls, a jay, carrion crows and rooks.

Although common reed is the main species associated with reedbeds, there are always other plants to be found. Reedmace, yellow iris, bur-reed and rushes were seen along the edges of the board walk. In some of the drier stands hemp agrimony, great willowherb and bittersweet were recorded. Close to the board walk carr woodland had developed on the drier ground, naturally over time reeds will be taken over by scrub species such as willow and alder as part of a natural succession process.

In Pembrokeshire most reedbeds are unmanaged, however without management reedbeds may naturally dry out and turn to woodland in the medium to long term. Operations such as reed cutting, scrub control and water level management will slow down or reverse this process. The appropriate management will be site specific and dependant on the species that currently use or are to be encouraged to use the reedbed. The key elements of a reedbed management are water levels, water - reed interfaces, reed/vegetation management including reed cutting, scrub management, reed litter depths. Pembrokeshire Coast National Park Authority staff are developing a management scheme to ensure the biodiversity interest at the reedbed in Freshwater East is maintained and enhanced.



Historically reedbeds were cut for material to be used in thatched roofs. This management practice is being reintroduced into some of the larger reedbeds in Pembrokeshire where reed can be sustainably harvested. This creates a diversity of micro-habitats on sites and can lead to an increase in species richness of a site.

Otters can be associated with reedbeds especially where a healthy eel population is found. Although no evidence of otters has been reported in the reedbed at Freshwater East they are in the area and could be using the reedbed for shelter and feeding. Otters frequently spraint (poo) on boardwalks to mark their territory, so it's worth keeping a look out for otter spraint in prominent places.

4. Sand dunes

Information on sand dune formation was included in the WoYP report from 2007. This is available to download from http://www.wwbic.org.uk/wildlife_on_your_patch.asp

5. Glow worms

Quote from the UK Glow Worm Survey Home Page (www.glowworms.org.uk) "Some people reported a bad year, but others commented that they had never seen so many, in one case in over 50 years! By mid August, some sites were still in full swing though most others had more or less finished", as was (unfortunately) the case at Freshwater East! Despite this, local residents have confirmed high numbers in and around the dunes earlier in the year (June and July).

With regard to habitat conservation the UK Glow worm Survey describes how Glow Worms need a supply of small snails as food (in areas un-treated by pesticides) and therefore a patch of vegetation where they can find the snails. They also need a comparatively open area where the females can display to attract a male in June, July and August. The varied habitat mosaic and grazing/cutting regime within the dune system (as managed by PCNPA and FERN) ensures that Glow Worms have both such feeding and displaying habitat.



Glow worm, (*Lampyris noctiluca*).
Photo copyright [Robin Scagell](#)

It is interesting to note that in previous years Glow Worms have been recorded very near mash/reed habitat on the Penally Corse SSSI; a similar habitat to that at Freshwater East Marsh.

Glow Worms may be declining nationally (although not protected) due to habitat loss and light pollution, however, under recording may be responsible for low population numbers. Records from Freshwater East can be submitted directly to the UK Glow Worm Survey. UK Glow Worm Survey Home Page www.glowworms.org.uk.

6. Bats

Pembrokeshire is home to at least 12 of Britain's 16 resident species of bat. The County's specialities include nursery roosts of Lesser and Greater Horseshoe bats which are two of Britain and Europe's scarcer bat species (with such roosts very close to Freshwater East), together with recent discoveries of Barbastelle in the south, middle and north of the County.



Greater horseshoe bat
Daniel Hargreaves /
Bat Conservation Trust



Lesser horseshoe bat
Gareth Jones /
Bat Conservation Trust

While we did not note any rarities, we did identify many pipistrelle species feeding on emerging invertebrates over the reedbed area; an extremely important food source for all bats.

Habitat loss, light pollution and increased pesticide use are some of the factors responsible for declining bat numbers, so managing the dunes and marsh for wildlife provides much needed foraging and feeding habitat.

To find out more about bats and how you can help these amazing but vulnerable animals, visit the Bat Conservation Trust's website where you can become a member and discover the many ways you can get involved to do your bit for bats! The website is www.bats.org.uk and the free National Bat Helpline can be reached on 0845 1300 228. You can also find out more about Pembrokeshire Bats at www.pembsbats.org.uk/



Common pipistrelle
Hugh Clark /
Bat Conservation Trust

8. Conclusion

Many species of animal and plant are unable to travel over large areas of intensely managed countryside. These areas tend to lack food and shelter from predators, or are simply too large for small creatures to find their way across. Therefore, many species may become confined to small 'islands' of habitat. If these islands become unsuitable for a species, the population may die out and. If the next nearest population is too far away, local extinctions result.

The interlinked habitats at Freshwater East, provide excellent opportunities for species to move from one place to another, and create new colonies both within and along the coast, helping avoid local extinctions. This connectivity of habitats helps maintain the richness and diversity of our wildlife at both local and national levels; Communities such as yours can play an important role in this.

Report produced by: Bethan Cox (Pembrokeshire Biodiversity Partnership) and Kiri Howell (Pembrokeshire Coast National Park Authority).

Plants Recorded on the WoYP event 24th August 2010

Alder	<i>Alnus glutinosa</i> L.
Ash	<i>Fraxinus excelsior</i> L.
Bittersweet	<i>Solanum dulcamara</i> L.
Bramble	<i>Rubus fruticosus</i> agg.
Bulrush	<i>Typha latifolia</i> L.
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i> L.
Common Evening-primrose	<i>Oenothera biennis</i> L.
Common Fleabane	<i>Pulicaria dysenterica</i> L.
Common Knapweed	<i>Centaurea nigra</i> L.
Common Nettle	<i>Urtica dioica</i> L.
Common Ragwort	<i>Senecio jacobaea</i> L.
Common Reed	<i>Phragmites australis</i>
Common Sorrel	<i>Rumex acetosa</i> L.
Creeping Thistle	<i>Cirsium arvense</i> (L.) Scop.
Daisy	<i>Bellis perennis</i> L.
Dog-rose	<i>Rosa canina</i> L.
Early Marsh Orchid	<i>Dactylorhiza incarnata</i>
Great Mullein / Aaran's Rod	<i>Verbascum thapsus</i>
Great Willowherb	<i>Epilobium hirsutum</i> L.
Hemp-agrimony	<i>Eupatorium cannabinum</i> L.
Ivy	<i>Hedera helix</i> L.
Lesser Trefoil	<i>Trifolium dubium</i> Sibth.
Marsh Ragwort	<i>Senecio aquaticus</i> Hill
Meadowsweet	<i>Filipendula ulmaria</i> L.
Mugwort	<i>Artemisia vulgaris</i>
Oxeye Daisy	<i>Leucanthemum vulgare</i> Lam.
Red Bartsia	<i>Odontites vernus</i> (Bellardi) Dumort.
Red Campion	<i>Silene dioica</i> (L.) Clairv.
Red Clover	<i>Trifolium pratense</i> L.
Ribwort Plantain	<i>Plantago lanceolata</i> L.
Scarlet Pimpernel	<i>Anagallis arvensis</i> subsp. <i>arvensis</i> L.
Silverweed	<i>Potentilla anserina</i> L.
Soapwort	<i>Saponaria officinalis</i>
Spear Thistle	<i>Cirsium vulgare</i> (Savi) Ten.
Square-stalked St John's-wort	<i>Hypericum tetrapterum</i> Fr.
Water Mint	<i>Mentha aquatica</i> L.
White Clover	<i>Trifolium repens</i> L.
Willow species	<i>Salix</i> spp
Wood Sage	<i>Teucrium scorodonia</i> L.
Yarrow	<i>Achillea millefolium</i> L.
Oak species	<i>Quercus</i> spp

Animals recorded (NB grasshoppers haven't been verified).

Carrion crow	<i>Chorthippus brunneus</i> (field grasshopper)
Herring gull	Heath grasshopper
House martin	Meadow grasshopper
Magpie	Lesser marsh grasshopper
Jay	Dark bush cricket
Swallow	Midge
Rook	Ladybird
	Moth
Common pipistrelle	Glow worm

Frog

WILDLIFE ON YOUR PATCH

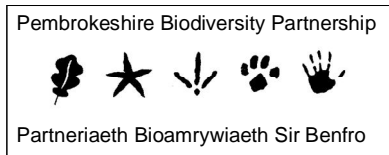
FRESHWATER EAST HELPERS



Vicky Tomlinson
Voluntary Warden
Pembrokeshire Coast National Park
Freshwater East Reserve for Nature



Kiri Howell
Community Ranger, South
Pembrokeshire Coast National Park



Bethan Cox
Biodiversity Implementation Officer
Pembrokeshire Biodiversity Partnership
Bethan.cox@pembrokeshire.gov.uk



Rupert Dunn
Valuing the Environment Officer
PLANED
jetskeg@planed.org.uk